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THE GENESEE FARMER.

SATURDAY, JULY 28, 1838.

The Monthly Genesee Farmer.

The success which this paper has met with, has exceeded our expectations. The original edition of 8,000 copies of the current volume, has been taken up, and we are now engaged in reprinting the back numbers; and shall in a few weeks be able to supply new subscribers with the numbers from the commencement of the volume. For the efforts which have been made by the friends of Agricultural improvement to circulate the Monthly Farmer, we are truly grateful, as well as for the frequent and warm expressions of approbation of the manner in which it has been conducted. We give the following extracts from a private letter from our old correspondent ULMUS.

"I have long wanted to write you a *long* letter upon more subjects than one. I wish to say to you, with how much spirit and ability your Genesee Farmer is conducted! more so, if possible, than ever; and to say to you also, that its influence, so far as my observation extends, is most salutary and beneficial to our great agricultural interest. I really hope that your exertions are successful in obtaining the remuneration that they deserve, in the extended circulation of the paper, the cheapest work of its value in Christendom! Of this, there can be no question. Only think of it. Fifty cents—the price of a tavern breakfast, will buy the Monthly Genesee Farmer for a year! Who, possessed of any intelligence in agricultural affairs, or owning,—or ever expecting to own, a farm, would hesitate for a moment to patronize it. But, true it is, that thousands yet hesitate, and will plod along for years in the dull pathway of old customs, habits, and notions, before they will adopt the newer, altho' well tried, and thoroughly ascertained improvements in what they are more interested in than any others, their own profession. The farmers will, however, come to it. Though slow to believe, and slower still to adopt, they will finally embrace the advantages so long and earnestly held out to them; and the time will arrive, and at no distant day too, when our Agricultural Journals will not only be liberally and extensively patronized, but the first and most accomplished talent of the country, which is indeed now employed, will be amply *paid* for conducting them.

"America is the country of all others, where not only its land-holders, but its practical farmers, (who are, and in all coming time, if our institutions shall be preserved, must be its land-holders in general,) should, and must, from the pursuit of their own interests, be intelligent in their profession. Intelligence, and that too of a high order, in the business in which they are engaged, is the prominent trait of American character. And why should not the farmer possess it equal to any other class of citizens? There can be none, not the slighest apology for the absence of it. The means for the dissemination of knowledge among our people are such as are enjoyed by no other people on earth. Our facilities for rapid and remote communication are unequaled, and we lack but the inclination to be well informed in all that appertains to our welfare.

"Look but for a moment at the *political* information of our country. Every individual, male and female, man, woman, and child, old enough to have an opinion at all, has one of some sort or other on politics—right or wrong;—and that opinion is obtained either by direct investigation, from reading or discussion. No man will be cheated in his politics. If his arguments are refuted, he refers at once for authority to his newspaper, and to the highest (in his estimation) authority also, upon which he continually practices and acts. And all this too, on matters of *opinion*, which are often mere theory, of little practical consequence, and in many instances as often wrong as right. The people not only *profess* to understand the theory and the practice of their government, and the institutions under which they live, but they *do* understand them, and they detect with a sagacity and jealousy as active and vigilant as their suffrages when bestowed are confiding, the errors or transgressions of their public servants. This is all right, and as it should be. A vigilance nothing less than this would preserve to us our liberties and our institutions. But in the every day business of life—that which concerns our private and pecuniary affairs, how negligent are we apt to become, and how little do we consult those sources of information so easily obtained, and so beneficial to our permanent welfare! This should not be so: and I am cheered in the belief that our farming population are fast improving in this item of their prosperity. With the dissemination of agricultural papers, has the superior improvement and cultivation of our farms extended: and it is not saying too much to state, that within the last ten years some districts of our country have increased from twenty-five to fifty per cent, in their products per acre. This fact is most conclusively corroborated in the increased value of farms in the older portion of our country, and in the improved appearance of the buildings and soil of those who pay increased attention to the business of agriculture. Again do I most earnestly express the wish that the circulation of your excellent paper may succeed according to its deserts. That, indeed, would be success enough, coupled with the reflection that its extended circulation was annually adding millions to the productive wealth of the country."

Harvest Drinks.

The bounties of a kind Providence have been showered upon us with a liberal hand; the fields are rapidly becoming 'white to the harvest;' the weather is and has been most intensely warm; a vast amount of labor must be performed under a burning sun to secure the crops; and the question may be asked, what, under such circumstances, shall be the harvest drink of the husbandman? Not ardent spirits of any kind; nothing that can destroy both soul and body, we hope will be the prompt response of every farmer in the country. To repeat that the severest labor of the harvest, in the hotest weather, can be better performed without ardent spirit, than with it, is to repeat a mere truism, for thanks to the good sense of the farming community, there is scarce a neighborhood that does not furnish abundance of examples in proof. Spirits then are not, as was once supposed, necessary to the performance of severe labor, and their use ought not to be tolerated only to please a vicious and depraved appetite. Good beer, home brewed, with molasses, ginger, and hops, forms a pleasant drink and one which most people like. Simple molasses and water, with just acid enough in it to be pleasant, is an excellent drink, and one that assuages thirst in a greater degree than most others. Some add to a pitcher of this drink a spoonful of ginger; and where considerable water is drank something of the kind may be beneficial. Milk and water makes a healthy drink, but vessels containing it, are, in very hot weather, with difficulty kept sweet. Some have recommended the Scotch drink, viz. a little oatmeal stirred into the water immediately before drinking; and Judge Buel pronounces it one of the best of beverages. Very cold water must be guarded against by wetting the face and hands before drinking, washing or rinsing the mouth before swallowing, and not taking it in large quantities, while the body is warm.

CULTIVATION OF FRUIT.—No. 7.

RASPBERRY, GOOSEBERRY AND CURRANT.

Although these fruits are not so important as some others, they should be considered as indispensable to every fruit garden. Their early maturity, their pleasant and agreeable flavor, the certainty of the crop, and the short period of time required to bring them forward to a good bearing state, render them truly valuable.

The Raspberry.

This is generally considered as much superior to the other two in flavor. Most of the varieties are propagated with great facility by transplanting the suckers, and those which do not increase by suckers, are easily propagated by layers. Of the latter, are the Early Red, and the American White, both of which are well worthy of cultivation. The extremities of their recurved stems frequently take root spontaneously by bending over to the earth; but where this is not the case, they may be made to root with facility by making a hole in the earth with a sharp stick, thrusting in the ends of the branches, and securing them by pressing the earth about them with the foot. After one summer's growth, the newly rooted plants are detached, either in the autumn of the same year or the succeeding spring, and will bear some fruit the first year, and plentifully the second. New varieties are raised from the seed, and will come into bearing the second year so that their quality may be determined. Bridgeman says, "Raspberry beds are in their prime about the third or fourth year; and if well managed, continue in perfection five or six years, after which they are apt to decline in growth, and the fruit to become small, so that a successive plantation should be provided in time. Select new plants from vigorous stools in full perfection as to bearing."

The soil for the raspberry should be rich and inclining to be moist. The culture is very simple; for common varieties, consisting merely in pruning each spring, and in keeping the weeds and grass well cleaned away from around them and the soil well cultivated. The pruning is best performed early in spring. All dead stems should be removed, grass and weeds cut away, and all the smaller shoots cut off even with the ground, leaving only from three to five of the most vigorous of the last season's growth for bearing the coming summer; these should be cut off at the top to about four-fifths of their original height, and neatly tied together. If they are slender and not sufficiently rigid to bear the future weight of leaves and fruit, they should be secured to a stake. In tying them together, they should be allowed to spread open at the top in the form of a wine-glass.

There are twenty or thirty named varieties of the Raspberry, but we are able to speak from personal knowledge of but few of them. The *White* or *Yellow Antwerp*, is an excellent one and of large size; for excellence it is commonly considered as standing at the head of the list; but it partakes of a slight musky flavor, hence it is considered by some as inferior to others. The *Red Antwerp* is highly esteemed, but is inferior to the preceding.* The *Red Cane* is a good bearer and has a pleasant flavor. The *White American* is a very valuable one, and is probably too much neglected. The *Black American* or wild raspberry, (*Rubus occidentalis*) affords an excellent fruit, which probably might be much improved by cultivation. Other varieties are recommended, as the *Double Bearing*, *Woodward's Red Globe*, *Red Alpine Monthly*, *Barnet* or *Cornwall's Red Prolific Seedling*, *Cornish*, and *Brentford Red*.

The Currant.

The currant is very hardy, grows freely, and almost uniformly bears very plentiful crops; the pleasant flavor of the fruit is well known, and ripening early in summer

* These two varieties require protection in winter in the vicinity of Boston, by bending down the branches and covering them with earth; but this care is not generally needed in Western New-York.

when but few kinds of fruit are yet mature, it becomes very valuable.

As to soil, Loudon says, "it generally does well in any common garden-ground, well tilled and recruited; it bears the *greater crop* in a strong loam, or improved clay, somewhat moist; the *earlier* in a light sandy mould, which is not poor. Previous to planting the ground should be dug two feet deep."

The mode of propagating the currant is by *cuttings*. The shoots for this purpose are to be of last year's production, and of vigorous, straight and thrifty growth. Before planting, every bud is to be cut off closely except two or three near the top, to prevent too many stem growing. They should be inserted at least six or eight inches into the earth. Instead of allowing numerous shoots to spring up from each root, they should be trained to a single upright stem to the height of a foot, at which point the branches should radiate on all sides, in an upward direction, so as to form a handsome spreading top.

Currants, on account of their hardiness, are commonly totally neglected in culture, and are suffered to become overrun with grass and weeds, and to become crowded with suckers and numerous superfluous branches. Inferior fruit is always the result. To prevent this and increase the flavor and size of the fruit, they require proper and seasonable pruning, as well as the cultivation of the soil. The leading requisite to be observed in pruning, is to cut away all superfluous shoots, especially those of least thrifty growth, and also old, unproductive branches, so that air and light may be freely admitted, and the fruit not too much crowded upon the bushes. Neill, author of the treatise on Horticulture in the Edinburg Encyclopedia, says that Macdonald, of Dalkeith House, "raises currants of the finest quality. A good deal depends on the way in which he manages the bushes, especially during the ripening of the fruit. He prunes the bushes at the usual season of mid winter, shortening the last year's shoots down to an inch or an inch and a half. Next summer the plants show plenty of fruit, and at the same time throw out strong shoots. As soon as the berries begin to color, he cuts off the summer shoots to within five or six inches above the fruit. Sun and air thus get free access, and more of the vigor of the plant is directed to the fruit: the berries are found to be not only of higher flavor, but larger than usual." Kenrick says, "Mr. A. D. Williams of Roxbury, Massachusetts, practises winter pruning on perfectly similar principles, and with the most decisive results."

The *Red Currant* is the most highly flavored; but the *White*, being larger and not so sour, is by many preferred to the former. In the Catalogue of the Horticultural Society of London, are enumerated nine varieties of the red and four of the white currant. Loudon says, "the best are the *Red Dutch, Knight's large red, Knight's sweet red*, and *Knight's early red*. The best white currant is the *White Dutch*."

The Gooseberry

Is propagated by cuttings, similarly to the currant. To succeed well, it should grow in very rich soil. Pruning the gooseberry is of still more importance than that of the currant. The following directions are from Bridgeman.

"The shoots retained for bearers should be left at full length, or nearly so; the first pruning should be done before the buds swell, so as not to endanger their being rubbed off in the operation. Cut out all superfluous cross shoots, and prune long ramblers and low strugglers to some well placed lateral or eye; retain a sufficiency of the young well situated laterals or terminals, to form successional bearers. In cutting out superfluous and decayed wood, be careful to retain a leading shoot at the end of a principal branch. The superfluous young laterals, on the good main branches, instead of being taken off clean, may be cut into little stubs of one or two eyes, which will send out fruit buds and spurs. Some persons, not pruning the gooseberry bush on right principles, cause it to shoot crowdedly, full of young wood in summer, from which the fruit is always small, and does not ripen freely with full flavor; on which account it is an important point in pruning, to keep the middle of the head open and clear, and to *let the occasional shortening of the shoots be sparing and moderate*. Between the bearing branches, keep a regulated distance of at least six inches at the extremities, which will render them fertile bearers of good fruit."

The gooseberry is cultivated with greater care and success in England than elsewhere; and Lindley enumerates 722 varieties, some of which have furnished specimens of single fruit weighing an ounce and a half. But nearly all the English varieties, and especially those of large size, are wholly unadapted to culture in this country on account of mildew; and neither culture, pruning, nor any other remedy has been found that can be relied on as a remedy. There are some smaller varieties, cultivated in gardens in this country, which are entirely free from it, and these alone are to be recommended here. Sufficient information however as to their names, has not been obtained for a list to be given. Some of the *smaller* of the English varieties, when tested in this climate, may be found worthy of cultivation.

J. J. T.

Currant Wine.

We copy the following receipt for the manufacture of currant wine from the Farmers' Cabinet at Philadelphia. It is extremely simple; and as the editor says he received with it, a bottle of wine made in this manner, which is pronounced both by himself, and his friends, of superior quality, it is well worthy the attention of those who would manufacture this pleasant drink for themselves. The writer adds in a note, that the better the sugar the more valuable the wine, and that he uses broken down lump sugar in his manufacture. No brandy is required to give it a body, or preserve it for years.

"To every quart of currant juice, add three pounds of sugar, and water sufficient to make one gallon: let it remain in the tub all night; next morning remove carefully all the scum, then put it in the casks (reserving a small quantity to fill up with as it ferments) which will require from six to eight days; then place the bung in slightly for three or four days, then drive it well in and let it remain."

CATTLE—No. 3.

For a good many years past, the importations of cattle from abroad have been confined to two kinds, the Devon or middle horn, and the Durham, or short horn varieties; and the general excellence of these cattle is such as to justify the preference shown them by the breeder. In examining the cattle in different parts of our country, however, we discover traces of other and earlier importations, and now and then an animal whose general configuration, and particularly his horns, show that he has been derived from the long horns, a breed of cattle once very celebrated, is met with. This breed of cattle have probably exercised as much influence in modeling the type of what are called our native breeds of cattle, as any other, and may, therefore, be worthy of notice; though to the cattle breeder their principal interest is owing to changes they have experienced in the hands of skillful dealers in England, the excellence to which they arrived, and their sudden decline.

What are termed the native Irish cattle, or the Irish long horns, may be considered as furnishing the most striking peculiarities of this breed; though in the district of Craven and part of Lancashire, this breed of cattle have been noticed from the very earliest period. In the early breeds, "the horn frequently projected nearly horizontally on either side, but as the cattle improved the horn assumed other directions; it hung down so that the animal could scarcely graze, or it curved so as to threaten to meet before the muzzle, and so also prevent the beast from grazing; or immediately under the jaw, and so lock the lower jaw; or the points presenting themselves against the bones of the nose and face threatened to perforate them."*

It is somewhat singular, that in every great improvement of any particular breed of animals, the impulse is first given, and the effect in the remotest degree, can be traced back to a single individual. For half a century, there has not been a horse of note in England, whose descent could not be traced more or less directly from the Godolphin Arabian. We have already spoken of the influence exerted by the bull Hubback in originating the improved Short Horns, and the bull Bloxedge, in the hands of Mr. Webster, was not less famous than the former. This gentleman, Mr. Havel, Mr. Welby, and others, had done much in improving this stock, but their exertions were all outdone by the success of Mr. Bakewell, whose labors in the improvement of the English breeds of cattle and sheep, have placed his name in the front rank of British agriculturists.

His breeds of these animals were well known, both in England and in this country, by the names of the Dishley or Leicestershire cattle or sheep, from his residence at Dishley, in Leicestershire. It is to be regretted, that we have no full and particular account of the principles that guided Mr. Bakewell in his efforts, since it would seem that though remarkably successful himself, his mode of breeding did not render the excellencies of his breed of cattle constitutional or permanent, as he had scarcely left the stage, ere the peculiarities of the original type began to prevail, and the improved Bakewell stock are now but little known. From the observations of Mr. Marshall, it seems that his greatest aim was beauty of form, under the somewhat mistaken idea that beauty of form and utility are inseparable; the next was a proper proportion of the parts, so as to reduce the offal to the smallest degree; and another was to render the texture of the muscular parts fine and of good quality for beef; while a propensity to fatten was not overlooked, as after all the great value of any breed of cattle is its adaptation to the grazier and the butcher.

As Mr. Bakewell was nearly the pioneer in the improvement of British stock, he deserves great praise for his judgment in the proper selection of points to be aimed at in breeding; and as an acute observer of animals, he had sometimes found these desired qualities centered in the same individual, and was, therefore, certain they were compatible with each other. He was more unfortunate in selecting the long horns as his stock to breed from, though in his hands they reached a perfection only equaled by the short horns of Culley and Berry of the present time. In breeding, Mr. Bakewell discarded the common practice of selecting females of the common stock and crossing them with males of another breed; but his method of improvement was to select animals possessing the desired qualities, from the same breed, and increasing his stock from them. Two heifers from the celebrated long horn stock of Mr. Webster, and a long horn bull, selected with great care in Westmoreland, constituted his breeding stock in the commencement. Though confining himself to these animals, and their progeny most strictly, he was enabled, as his stock increased, to avoid the injurious consequences of breeding 'in and in,' by selecting animals the most distantly related, and in this way he established the good points, or removed the faulty ones, with a rapidity and skill hitherto unrivaled. It has been objected, that Mr. Bakewell carried his attention to the propensity to fatten so far, that the Dishley or Leicester breed of pure blood, "produce too small a quantity of eatable meat, and that, too, necessarily of an inferior flavor and quality. They are in general found defective in weight in proportion to their bulk, their carcases produce little else but fat, a very considerable part of which must be sold for candles instead of food."*

Mr. Bakewell was followed by Mr. Fowler and Mr. Princeps, and so high was the reputation and value of the New Leicesters raised by their attention and skill, that the public sales of their cattle rivaled in prices those of the best short horns of the present time, and they were sought after with the same avidity. Those who wish to understand the particular points in which the New Leicesters differed from the common long horns, are referred to the 4th vol. of the Genesee Farmer, or the vol. on British Cattle, where these peculiarities are pointed out. But what has become of Bakewell's improved long horn breed? is a question which may well be asked, when it is known that the breed has entirely disappeared from the vicinity in which they originated, and the farm from which they received their name. "The truth of the matter is, that no sooner had the master spirits of the day disappeared, than the character of this breed began imperceptibly to change. The cattle had acquired a delicacy of constitution, inconsistent with common management and keep; and they began slowly, but undeniably, to deteriorate. Many of

* British Cattle.

* Illustrations of Natural History.

them had been bred to that degree of refinement, that the propagation of the species was not always certain."*

Let the attention of cattle breeders be called to the fact stated in the last sentence, for all experience among animals—and we may add, the doctrine receives abundant confirmation from a race still higher in the scale of being—shows that breeding 'in and in' has a direct tendency to decrease the certainty of the propagation of the species; and the evil results noticed by Marshall, though counteracted by Bakewell's care and skill, were apparent in the cattle bred by his successors.

But though the particular breed of cattle known as the improved long horns has almost ceased to exist, as such, the beneficial effects of Mr. Bakewell's efforts have not been lost, but by crosses with other breeds, and in particular with the short horns, has been widely diffused. In the most highly favored districts, the short horn has superseded both the long and the middle horns, but there are in all countries extensive territories, in which a more hardy and less grossly feeding race of cattle will be required, and in such a mixture of the races, will be preferred to either the improved short or long horns. Some efforts have been made to restore the long horns the celebrity they once enjoyed, but experiments instituted to test their comparative value with either the Devons or Durhams have usually terminated unfavorably, which has added to their disrepute. Mr. Gibson, of Quernmoor Park, in the native country of the long horns, tried an equal number of the short and the long horns for twelve months; and on summing up the profit and loss at the expiration of the time, the short horns had given considerably more milk; the butter account was also in their favor; and they had improved considerably more in condition. The experiments of others have had a similar result. Mr. Harrison remarks, 'that the average weight of the long horns when fattened, is eight score per quarter, but their value is not so great either for grazing or milking by nearly or quite £2 per head.'

The Wiltshire cow was a species of long horn, and was considered as one of the best breeds in England for the dairy, which enabled them to resist the attempt made some years since to substitute the Devon for them, as more desirable in many respects; but the introduction of the short horn has caused the old breed to mostly disappear. The cross which has resulted from the Wiltshire and the short horn is highly valued in the dairy, both for the quantity and the quality of the milk. There is a constant tendency however to degenerate, and the cross must be carefully watched. The mode of prevention, which has been found effectual, is a frequent recurrence to a short horn bull, and frequently changing the bull. "The average quantity of cheese made from the cows of this district is greater than that from any other breed of cows in Britain; sometimes as much as 450 or 500 lbs. to a cow, seldom lower than 300 pounds."† Summers moderately wet, with closely fed yet fresh feed, are found better for the dairymen, than when wet, and the feed more abundant, but coarser. The celebrated Stilton cheese is made from a cross of a Leicester and Durham, is produced from the cream, and when of first rate quality, sells for from 30 to 50 cents per pround. Hundreds of tons of it are sent from Lancashire and Leicestershire to London every year. Though the short horn, or some cross of the kind, is generally found in the great dairies of the cities; yet a very large proportion of the butter and cheese made in Great Britain comes from the districts where the long horns have the ascendency.

A series of experiments in fattening cattle have been in progress for several years past at Woburn, the seat of the Duke of Bedford, in which cattle of different breeds have been fed alike, and the cost of the cattle, the expense of feeding, and the ultimate profit and loss of the different lots and methods have been carefully registered. The Durhams, or short horns of the improved kinds, from their early maturity or ripeness, and the facility with which they took on fat, have hitherto stood highest on the list, although in some instances they have been closely pushed by the improved Devons, and the Hertfordshire cattle. The polled cattle have been the lowest on the scale, and are now excluded from the pastures of the Woburn estate. The profits in feeding have been the greatest where turneps have been the base of feeding, in connection with hay; and the greatest loss was sustained where linseed cake was used as the principal food. We copy the following, as exhibiting the nature of the experiments, and the mode of conducting them:

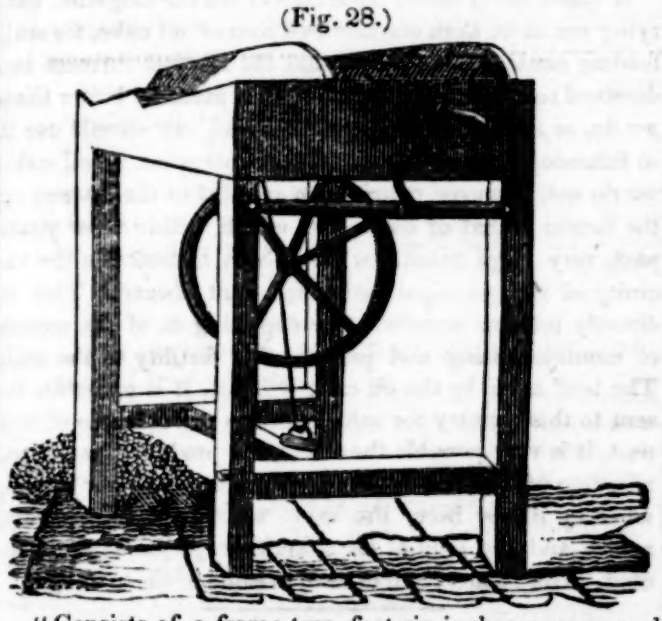
Six oxen grazed in the same pasture, were put up for stall feeding on the 6th of January, and fed till the 14th of April; they were divided into pairs.

The first pair, or Nos. 1 and 2, consumed of Hay,			
18 cwt. 1 qr., value	£2	14	9
Flour, 1 qr. 14 lbs	1	16	0
Mangel Wurtzel, 196 bushels	7	7	0
Expense of feeding,	£11	17	9
Gain, 3 cwt. 1 qr. 7 lbs., value	12	7	4
Gained by feeding,	0	9	7
Nos. 3 and 4 consumed of hay,			
20 cwt. 2 qrs., value,	£3	3	6
Bean flour,	1	16	0
Swedes turneps, 196 bushels,	7	7	0
Expense of feeding,	£12	9	0
Gain, 3 cwt. 2 qrs. 21 lbs.	13	15	4
Gained by feeding,	1	6	6
Nos. 5 and 6 consumed of Hay,			
23 cwt., value	£3	3	9
Bean flour,	1	16	0
Potatoes, 78 bushels,	4	4	6
	£9	4	3
Gain, 2 cwt. 3 qrs. 7 lbs.	10	0	0
Gained by feeding,		15	9

CORN SHELLERS.

A number of machines for shelling corn from the cob, have been devised for the use of the farmer, but none appears to have met with more general favor than Maxwell's corn sheller, a cut of which is given herewith. The particular excellence of this machine consists in the rapidity with which it performs the shelling; and its feeding itself, which materially lessens the care and labor. The Hand Corn Sheller of which the engraving is here given, as described by the inventor,

(Fig. 28.)



"Consists of a frame two feet six inches square, and three feet six inches high, in the centre of the upper part of which, is a cast-iron plate with teeth in it, fixed on an inclined shaft, which gives to the plate an angle of about 15 degrees; over this, are the several apartments of avenues, with springs, for receiving the ears of corn. The ears resting on the plate, and being confined sidewise, acquire a rotary motion, that brings all their parts in contact with the sheller. The wheel in the above view, gives motion to the sheller, by means of a pinion one-fourth the diameter of the wheels, the plate making four revolutions to one of the hand. The larger machine calculated for power is similar to the above, excepting in the shelling plate, which is of a *conical* form, with compartments all around for receiving the ears. A power machine recently sent to Washington for exhibition, contained twelve compartments for receiving ears, and with one horse power, is capable of grinding 500 bushels or more per day. The patent, or single rights, for sale by the inventor, James Maxwell, 259 Bowery, New-York."

Where large quantities of corn are raised as in some of the western states, machines of this kind are much wanted and would be invaluable. Where, however, corn is to be used for feeding animals, or fattening them, it is our opinion that grinding with the cob is much the best way of using this grain, and that a material saving would be effected by so feeding it. Where corn is to go to market, shelling is much the best way of fitting it, and the saving between threshing and shelling, would, by adopting the latter process on any considerable single crop, more than remunerate the cost of the Corn Sheller.

Saw-dust as Manure.

A correspondent inquires, "whether *saw-dust* from chestnut, whitewood, and oak timber, cannot be turned to some good account as a manure,—by combination or mixture with other substances—how would it answer mixed with horse-dung and lime in equal proportions."

Saw-dust applied in large quantities to heavy soil would doubtless operate very favorably in rendering it lighter and lessening its tenacity. Chestnut, whitewood, and oak, would probably impart their astringent qualities to the soil, and therefore would be inferior in value to that of bass-wood and perhaps of sugar maple.

We have applied saw-dust, not fresh, but after it had been exposed some months, perhaps a year, and have found it useful. If applied when fresh, the quantity should not be too great and it should be very intimately intermixed with the soil. It cannot ever be highly fertilizing, as it is of too inert a nature—probably no benefit would be derived from mixing it with horse-dung, over simple application without mixture. Experiments however must determine whether it can be used to much advantage on a farm. J.J.T.

The Pear Tree Blight.

It is distressing to the lover of good fruit, of which there are few kinds more delicious than the pear, to witness the ravages caused by the blight in this valuable tree, and which in some places threaten its total extermination. Like the yellows in the peach tree, which has rendered the production of this excellent fruit impossible in some parts of the country, once famous for their growth; the blight seems gradually on the increase, extending itself into new districts, and annually attacking trees that had been hitherto spared. We have within a few weeks, noticed several instances where large and flourishing pear trees have been nearly or quite destroyed the present season, the tops looking almost as dry and dead as if the trunks had been girdled, or a fire had passed under the branches.

To what the blight of the pear tree is owing, is still a disputed point, as the expressed opinions of intelligent gentlemen in different parts of the country fully prove. Some attribute the disease to an insect that deposits its egg in the bud or tender twig and thus causes the death of the branch, an operation somewhat similar to that of the *pyralis* on the vine, or the more familiar example of the injury effected at times by the locust on our forest trees. Others imagine it is owing to an excess of sap, producing such a growth of fruit, or repletion of the vessels, as to cause consequent exhaustion and death; a supposition somewhat favored by the fact, that the pear rarely suffers from blight until it has produced blossoms or fruit. By some the blight has been attributed to electrical causes, and preventives founded on such a supposition recommended. The Rev. Dr. Reed, of Poughkeepsie, says, "In a ride into the interior of the county, I observed in one neighborhood the pear trees were healthy, flourishing and productive, when a few miles distant they were decaying. This neighborhood abounds in iron ore, which suggested to me the idea that this mineral was necessary for the health of the pear. On returning home, I procured from a blacksmith's shop the cinders, and put a bushel around the root of each of my trees, of which I had already lost some, and others were affected; I also hung some old iron hoops on the limbs. The trees have since grown luxuriantly, and borne plentifully. Three years since, I took possession of a house and lot, where I now reside, where were three trees in an unhealthy state; and the same means have produced the same effect upon them. Relating these circumstances to a friend from Rhode Island, he remarked that his own case corroborated the theory I had adopted, for, said he, I have but one healthy pear tree left, and that stands near where an old blacksmith's shop formerly stood." Mr. Cook, of Virginia, as a preventive of the

* British Cattle. † Marshall's Midland Counties.

blight, whether occasioned by insects, atmospheric or electric causes, recommends "two parts of powdered copperas, and one part flour of sulphur, to be well mixed, and then sprinkled on a wet cloth three or four inches wide, which cloth is to be loosely wrapped some three or four times around the trunk, if small, or some of the branches. If the tree has many branches, three or five of them may be wrapped in this way; and as every rain dissolves a part of the contents, they gradually find their way to the trunk and roots, and rarely fail of preserving the health of the tree."

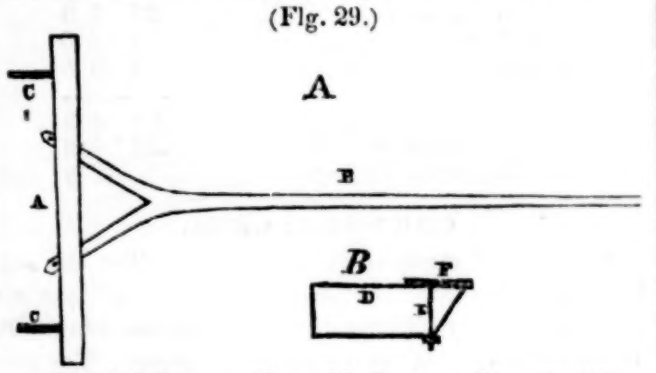
Though we have had little opportunity for observing the disease ourselves, we have been inclined to the opinion, that it is caused by an insect, as they certainly produce on other trees effects very similar to the blight of the pear; and had we trees attacked, we should carefully extirpate every branch affected as low as the discoloration of the shoot could be observed, and consign them to the fire to prevent extension from the increase of the insect. At the same time, we should think the applications proposed by Dr. Reed or Mr. Cook, should not be neglected. The quantity of potash and nitre combined in the cinders of the blacksmith's shop, not only makes them one of the most effective antidotes to insects, but when broken or powdered, or gradually wasted by the action of the atmosphere, one of the most efficient agents in promoting vegetation yet known. The copperas and sulphur, by being spread over the surface of the tree, would deter insects from ascending or operating on the tree, and might operate favorably, even should the disease be owing to atmospheric causes. It would, we think, be easy to determine the agency of iron in dissipating the electric fluid deemed to be injurious, by placing conductors of wire or other metalic substances on or in the vicinity of pear trees, and observing the result on the health of the tree. It is very desirable, if possible, to discover some mode of arresting this disease, or ere long the cultivation of the pear will become so precarious, as to deter the farmer or orchardist from attempting its growth; and we renew our invitation to those who have made experiments on this subject, to communicate the result for the benefit of the public.

Improved road Scraper.

Our able correspondent, Judge Bradley, has reprobated, and we think justly, the indiscriminate and common use of the scraper in the construction of roads, as accumulating the more light and friable parts of the soil in the middle of the roads, where soaked by rains they are converted to quagmires, or so deeply rutted as to be almost impassable. The great object in the formation of roads is the providing a hard smooth surface for the carriage way, and this can only be done in the first place by having the road so leveled and drained that no water can rest on or immediately under it; and secondly by preventing the formation of ruts, or if such are made while the surface is wet, closing or filling them again as soon as the road is dry. To effect this latter purpose some districts within a year or two have adapted a form for a scraper that does the business rapidly, and from what we have seen of the roads in such districts, most effectually and admirably. The cost of the scraper is but trifling, and may be made by any common carpenter and blacksmith.

A stick of timber six feet in length, twelve inches in width and five or six in thickness is to be provided; hard heavy wood should be selected as the bolts or screws in such wood are more secure, and light wood would require to be constantly loaded to produce the desired effect. This stick forms the scraper, and is drawn by a suitable neap or tongue, framed into it in the manner of a cart or sled. One part of the neap where split, is cut shorter than the other, so that when used, the scraper does not run square on the road but diagonally or quartering. [The engraver has by mistake made the figure to represent it as running square, having made both parts of the neap of equal length.] The slant in the six feet, is about one foot; which is sufficient to throw all the stones out of the line of travel, level the ruts, with the hard dirt elevated on their margin, and smooth the whole surface. The cutting part of the scraper is composed of a thin wide bar of iron screwed or bolted upon the front of the scraper, the lower edge coming half an inch below the wood, which by bevelling backwards is made thin at the place on which the iron is put. We have seen several of these scrapers, in which, instead of a bar of iron a worn out sawmill saw plate was used, and answered an excellent purpose. The decided improvement effected in the roads of those distsicts where this scraper has been introduced, would lead to the hope that most districts will provide such an implement to facilitate labor, and benefit our roads generally. It may be remarked however that such a scraper can do no good where the roads are muddy, and that to keep roads dry is essential to their formation, preservation, or repairs. Where the road can be kept dry, there is no difficulty in keeping the carriage way in good order; as an occasional use of this scraper, and the labor is quickly performed with a good span of horses, will remove all the small stones, level ridges by cutting them off, and by the quartering movement deposit them in the ruts that have created the elevations. The following sketch (fig. 29) may give an idea of the appearance of this implement. A is a scraper complete; B a section of the timber forming the head, showing the shape, plate of iron, and securing bolt.

(Flg. 29.)



A Head 6 feet.—B Neap 11 feet.—C Pins for lifting the scraper.—D Section of the scraper head.—E Bolt, with screw securing the plate of iron, F.

Is this Right?

A vessel lately sailed from New-York for England, carrying out more than one hundred tons of oil cake, for stall feeding cattle. This shows that the English farmers understand the nature and value of that material better than we do, or instead of sending it abroad, we should use it in fattening beef at home. The exportation of oil cake we do not, however, consider so suicidal to the interest of the farmer as that of bones; of which, within a few years past, very large quantities have been collected in the vicinity of the principal cities and sent abroad. This is directly robbing ourselves, by depriving us of the means of communicating and perpetuating fertility to the soil. The beef made by the oil cake will not, it is probable, be sent to this country for sale, but from the example of the past, it is very possible that the grain produced by the application of this bone dust may be returned to our shores, when by its use here, the same wheat would have been raised, and the land at the same time permanently benefited. Our farmers will do well to think of these things.

White-washing Trees.

The practice of white-washing trees, particularly fruit trees, which at one time prevailed extensively, seems to have been mostly discontinued, but for what reason, is not, we apprehend, generally understood. Washing trees with lime was adopted for the purpose of removing mosses, cleaning the bark, destroying insects, particularly the aphis, and that it was efficient for these purposes, few who have tried it will deny. The objections made against the practice were, that the coating of white-wash excluded from the bark the action of air and moisture, and that by causing the rough bark to scale off, the tree was deprived of a covering which might be beneficial in protecting it from frosts in our severe winters. These objections we are inclined, from our own experience and observation, to consider of little weight when compared with the positive advantages of the application. We have never known a tree injured from the white-washing process; on the contrary, we have seen trees covered with the aphis, or with dead rough bark, effectually cleaned, and rendered vigorous and healthy, the bark looking green and the foliage vigorous. To produce the beneficial effects, it is not necessary to have the white-wash laid on of the consistence and thickness of a coat of mortar; but thin and even with a common brush. If the tree is very mossy, or has much dead bark, rubbing it with a stiff broom, or otherwise cleaning the trunk, should precede the application of the white-wash. Experiments have shown, that in nurseries of trees, those that have been washed either with lye or lime, grew much more rapidly than those not subjected to the process. We should be pleased to have the opinions of our farming friends on this subject.

SILK CULTURE.

In this climate, (New England,) the culture, setting out mulberry roots, or cuttings, commences at the usual time of making our gardens, after the spring frosts, and when the earth has been suitably warmed by the sun—last of April or beginning of May; and soon as the foliage has grown to the size of an apple leaf, or the full size of the white mulberry leaf, (about the 15th or 20th of June,) the eggs may be brought out for hatching; and if they can be kept back, so as to be hatched at different times, as the foliage multiplies, the cultivator will have the advantage of several crops in succession from the same lot of eggs—a much better way than to breed *in-and-in*, as it is called. Eggs may be preserved during winter in a cool place; freezing does not injure them; but before spring, they should be secured in glass bottles, corked tight, to exclude the external air, and each bottle of eggs put into an ice house placed on a *cake of ice*; if set upon a shelf, they would hatch even in an ice-house. Eggs thus secured, may be kept back, save much labor, time, and expense. As one class of worms are advanced, another can succeed them on the same shelves or hurdles. In this way, the same number of trees would feed double the usual quantity of worms.

In gathering the foliage, the buds must not be injured, nor the extreme ends of the limbs deprived of their leaves, leaving two or three leaves on the end untouched; commencing on one side of the field, and when once gone over, there will be a new crop of leaves ready at the place of beginning; and thus the foliage may be gathered several times from the same shrub or tree, whether the tree be the product of a root or cutting. I had roots and cuttings set out last spring, the foliage of which was gathered three or four times from the same trees, without injury; indeed, the trees apparently grow better by having the leaves taken off so frequently, always leaving the buds uninjured, and the extreme ends of the branches without stripping. Instead of stripping the leaves, each leaf should be taken separate; if the bud should be injured, it would be spoiled for a cutting, or even foliage. Frequent defoliation of the mulberry does not injure it, although such treatment would spoil some other trees.

When trees are started from cuttings, it will often be found that a shoot will grow several inches before there is any root formed; in this case the support is derived from the atmosphere, instead of any assistance from the root, as is usual with other trees.

Vegetables of rapid growth are said to perspire their weight in twenty-four hours; this rapid evaporation or perspiration will account for so many cuttings failing to become trees; the leaves become discolored, wilt, and the plant is ruined. But to avoid this, let the cuttings be watered in dry weather, and take off the leaves until roots shall be formed.

Respecting the *cultivation*, the earth may be stirred or the trees hoed so frequently as to prevent the weeds growing; but not after the first of August, that the trees may have an opportunity to form wood; and the location must be so elevated and dry as to be out of the way of water setting near the plants.—*Congressional Report.*

A gentle shove to Farmers about Boiling and Steaming Food for Stock.

Those farmers who intend to save from one-third to one half in feeding their stock the coming autumn and winter, should look out in time and procure and put up a proper apparatus for boiling or steaming grain, roots, and cut hay and corn stalks. It will take some time to think and talk about this very important, though not expensive fixture; the place where it should stand, and the particular manner of its construction will claim due consideration; and after these matters are determined on, the materials must be got together and a workman engaged to put it up; and by the time all this is done I fear it will be needed for preparing the food for the hogs; so that you had better begin to think it over soon, and not leave till another year what had better be accomplished this season. A farmer who put up a very simple and cheap affair for this purpose last fall, thinks that it saved him the whole expense incurred, in fattening his hogs alone. He gave them no grain that was not first boiled.—*Farmers' Cabinet.*

COMMUNICATIONS.

Burning Lime.

Mr. Editor—As your valuable paper is devoted to giving to its readers every kind of information, either directly or indirectly connected with agriculture, I beg to obtain some instructions through its columns as to the best mode of burning lime and preparing the kilns. In the district of country to which I allude, lime has until lately been entirely unknown, and consequently an entire ignorance prevails as to the proper mode of burning it, &c. We now believe that we have discovered a considerable quantity of it, combined with a small portion of iron, which, from hasty analysis, I find contains about 20 per cent of pure lime, (oxide of calcium.)

A Subscriber.

Montrose, Pa., June 8, 1838.

From some knowledge of the district in which our correspondent lives, we think it probable that the limestone referred to, belongs to Prof. H. D. Roger's XI Formation, and is described as follows:

"A kind of conglomerate formed of small ovate pebbles or kernels of limestone, of a light bluish gray, and sometimes a faint greenish or reddish tint, imbedded, though rarely in contact with each other, in a paste of soft argillaceous red shale. Occasionally the rock contains such an abundance of these little limestone pebbles, which in size and shape are not unlike the smaller sort of beans, and the cement uniting them is so calcareous that it possesses almost the purity of an ordinary limestone.—This variety has in a few instances been calcined, and has been found to afford a lime, which though not very pure or white, is yet tolerably well suited for making mortar, though better adapted to the purposes of *a manure for the soil.*"

We would recommend our correspodent not to incur the expense of a lime-kiln until he shall have more carefully ascertained the value of the rock in question. Lime is often burnt in log-heaps: a layer of logs and a layer of the stone alternately. Dry timber will be best; and to confine the heat in a shallow pit or opening into the side of the bank would be economical. A thick covering of sods laid on the top would also be useful.

When the rock is calcined and slacked, it should be applied to the soil in measured quantities, so that its value may be accurately tested. Pasture land, some months previous to its being ploughed and planted or sowed with wheat, would answer well for the experiment; or it may be better to strew it over a summer fallow at the rate of 30 or 40 bushels to the acre, and mix it with the soil by repeated harrowings. J. J. T.

Hoof-Ail Caused by Freezing.

Mr. Editor—Much as has been said and written upon the subject of hoof-ail, I am inclined to think that the disease is yet but imperfectly understood.

I see by the numerous communications in your paper upon the subject, that many, undoubtedly, experienced farmers are of the opinion that it is caused by the ergot or smut of June grass. Others, equally experienced, are confident that this has no agency in producing the disease.

Now, sir, you will readily perceive it is impossible to form a correct or consistent conclusion upon such conflicting opinions; and of course the most rational decision is, that the disease is a great mystery, and no effectual preventive or remedy can at present be devised.

I will state for the benefit of those who may feel interested, a case that has occurred under my immediate observation. About the first of last March, I discovered in a three years old heifer, symptoms of freezing, evinced by a frequent kicking, or rather violent shaking of the hind feet. I then supposed they were slightly touched by the frost, as the preceding night had been extremely cold; although on a more careful examination, there was no congelation of the skin or flesh. I made no application at the time. In the course of two or three weeks, there was a slight appearance of lameness. I thought of the hoof-ail, but did nothing; the lameness increased, and, finally, to "make a long story short," my cow became very poor, and is now a mere skeleton—gives a small mess of milk, but of excellent quality. I have recently made an incision on the bottom of each of the hoofs, about an inch and a half from the end, out of which issues bloody, putrid matter. The entire seat of the disease is evidently in the marrow or cavity of the hoof, and where the suppuration originally commenced; as the legs, even to the heel or back part of the hoofs, are perfectly sound and in a healthy condition. A part of two hoofs have lately slipped off. Now, sir, is not this disease the result of freezing, or in other words, is not hoof-ail caused by freezing? I ask some of your correspondents for an answer.

East Bloomfield, July 18, 1838. A. B. G.

Leached Ashes.

Mr. Editor—As leached ashes are allowed to be a good manure on many kinds of land, and in clearing new land it has been extensively practiced to collect the ashes and boil down to black salts, leaving large quantities of leached ashes in heaps on almost every improved farm in this comparatively new country, I would inquire whether in laying exposed for perhaps from five to fifteen years, there would probably remain any quality that would be of value as a manure. I make the inquiry, from having been informed that when leached ashes are used as manure, that they are considered of equal value as unleached ashes. Your opinion on the above will much oblige your obedient servant. Jabez Burrows.

Mayville, July 9, 1838.

A large proportion of ashes consists of lime, which had entered into the composition of the growing wood; and this part would not be injuired by exposure to the weather; but the potash, which is also considered a fertilizer, would be chiefly washed out by the rains, in the length of time stated by our correspondent.

On soils, such as light sands and cold clays, which contain lime in but small proportions, leached ashes have been found highly beneficial, and would probably be so on most soils if applied in moderate quantities and well intermixed with the soil. J. J. T.

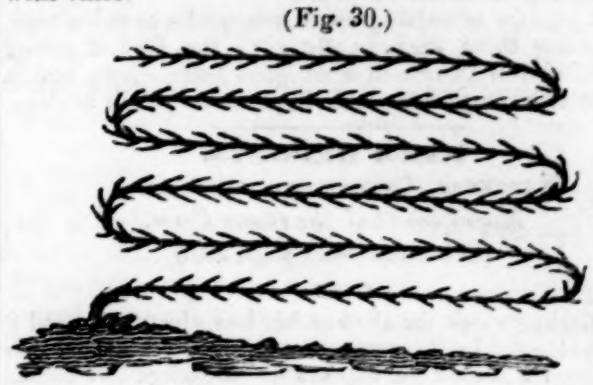
Pruning and Training Vines on open Walls.

[We copy the following from the last edition of McIntosh's "*Practical Gardener*," a valuable English work in two vols., octavo:]

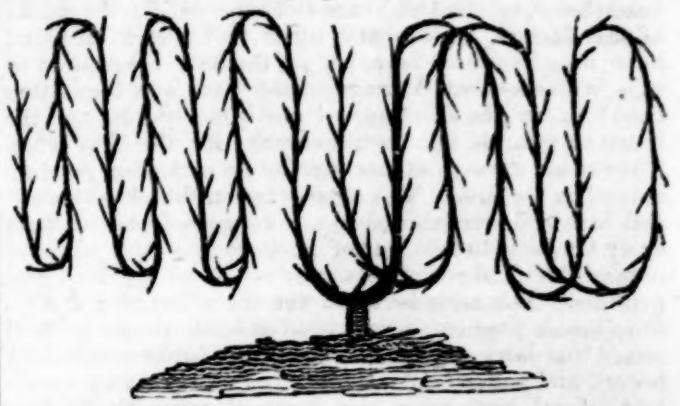
It is a general practice to prune vines on the open walls in spring, but as they are apt to bleed much, if that operation be delayed until the sap has risen, we deem it the safest way to perform it in autumn as soon as the leaves have fallen, and the wood is sufficiently ripened, or as soon after as convenient. Vines on the open walls, in favorable situations, are no unimportant part of the produce of the fruit-garden; and, in situations where the fruit does not quite ripen in ordinary seasons, it is, in its unripe state, of some consequence to the owner, not only for the use of the kitchen, but also for the more important purpose of wine making.

Vines, under such circumstances, may be trained and pruned in a variety of forms, and fancy may here be more indulged than with such as are in the vinery. As this plant, like some others, produces its fruit on young shoots arising from the wood of the preceding season, it therefore becomes necessary that that description of wood should be encouraged and equally distributed over the whole tree; and as the vine is apt to become naked, or thin of such wood towards the bottom, particularly under bad management, it is the more necessary to point out the necessity of counteracting that habit by a judicious use of the pruning-knife. However advantageous it may be in the management of vines under glass, to retain the shoots at some length, often of several feet, it is obvious that the same principle is not applicable to those in the open air. The practice of those, who cultivate vineyards for the purpose of wine-making, teaches us that cutting them short is advantageous, even in good climates; it is therefore more so with us in our less congenial one; and the success of those, who with us have carried this branch of horticulture to any extent, bears us out in the assertion. Vines in the open air break more regularly than when forced; therefore there can be no want of fruitful shoots, should the wood of the present year be shortened in at this time, to two, or often, where the buds are strong, to one eye. However, the eye nearest to the old wood is often weak, and less likely to produce a fruitful shoot. Our practice, in such cases, has been to rub off the eye nearest to the old wood, when weak, and to depend upon the next two for our supply. Where neatness is attended to in the minutiæ, this practice we own will in time make the spurs more bulky, but the extent of the crop will be proportionably great. As the finest flavored grapes are supposed to be produced at the extremities of the branches, or on those that are farthest from the root, it consequently follows that a mode of training similar to *figs.* 30, and 31, will have that effect within the least space of wall, wholly occupied with vines.

(Fig. 30.)



(Fig. 31.)



In conformity to this idea, as well as filling the empty spaces upon walls before the permanent trees fully extend themselves, a correspondent in the Horticultural Society's Transactions, proposes to train vines "horizontally under the coping of a garden-wall to a great distance, and by inverting the bearing shoots, the spaces between the other fruit trees, and the top of the wall, could readily be filled up; and if different vines were enarched to the horizontal branch, the south wall of a large garden might be furnished with a variety of sorts from the stem and root of a single plant, the roots of which would not incumber the border, in which the other fruit trees are growing. I have," he says, "an experiment of this kind now in progress in my garden. Within a few years past, I have gradually trained bearing branches of a small black cluster grape, to the distance of nearly fifty feet from the root, and I find the bunches every year grow larger and ripen earlier, as the shoots continue to advance."

According to Knight's theory of the circulation of the sap, the ascending sap must necessarily become enriched by the nutritious particles it meets with in its progress through the vessels of the alburnum; "but I suppose," he adds, "that there are certain limits, beyond which the sap would be so loaded with nutriment, that it could not freely circulate."

In pruning the vine at any season, or in any way, it is necessary to make the cut at least half an inch above the eye from whence the shoot is expected to spring; and it must be done in a sloping direction, to prevent the lodgement of moisture, which might tend to bring on decay, and consequently the ruin of the bud or embryo shoot. When the operation of pruning is completed, the shoots should be neatly nailed again to the walls, and they will require no farther care till the season of summer-pruning arrives.

From the Farmers' Cabinet.

Raise more Poultry.

Since the time that Esop wrote the history of the country maid and the milk pail, poultry and eggs have not sold for a better price, or at a greater profit, than they have within these few years. This is believed to have grown out of the immense amount of traveling, which has been increased and promoted by the fleetness and cheapness of rail road cars and steamboats. But whatever may be the cause of it, it is our interest to sell an abundance of eggs and poultry, so long as we can get a good profit by it. I was pleased with the suggestion made by your correspondent Q., in the last number of the Cabinet, for feeding poultry with boiled potatoes, inasmuch as it is a cheap food and may be always at hand. A farmer near Liverpool, England, keeps a large stock of poultry of various kinds in the same enclosure, with singular success. He has nearly an acre of land enclosed, with a close fence, about seven feet high. Within this enclosure are put up sheds for the different kinds of poultry, to secure them well from the rain, which is of great importance. There is a small stream of water which passes through the lot, to which they all have access, and they are regularly fed, three times a day, with boiled potatoes, which is their only food, excepting what grass, insects, and worms, they they pick up in their movements through the lot.

All young poultry require to be kept dry, and most old

ones are the better for it and it is said that young turkies, during their tender age, are the better for having a small quantity of red pepper occasionally mixed with their food, to stimulate their digestive organs to greater activity when they gormandize too much.

The practice of cutting up chives, garlic or onion tops, and mixing them occasionally with the food of young poultry, is well known to most good housewives, and is thought to be very serviceable in promoting their health.

FARM REPORTS.

NETHERBY, CUMBERLAND, (ENGLAND.)

Management of the Home Farm.

(Concluded from page 230.)

STOCK.

As feeding cattle for the butcher has always formed a principal point in the management of these lands, it is considered a matter of importance to select the breeds likely to arrive soonest at maturity. The pure short-horned breed, selected with care and expense from the stocks of the Messrs. Collins and other celebrated breeders, have long been used here, and on the best description of soils, with success. Various crosses have also been often tried between the short-horned and other breeds, and the result in general has been favorable for the first cross. The second cross produces here by no means so good an animal as the first. The cross between the short-horned and highland breeds produces a very good animal, with every tendency to feed, but of a nature almost as wild and untameable (and sometimes more so) as its highland progenitors. The cross between the short-horned and Ayrshire breeds produces a very good animal, generally well suited for dairy purposes. The cross between the short horned and polled Galloway breed produces a very excellent animal, possessing, in a great measure, the feeding qualities and best points of the short horn, and the hardiness and docility of the Galloway cattle. On good lands, this cross is here preferred to any other stock. The pure short-horned cattle are found, after many years' experience, to be rather too tender for the climate, and difficult and expensive to winter.

Galloway cattle are the general stock of the district. They possess many advantages, as they can at any time be brought to market. Their hardy and very healthy habits fit them well for the climate and soils of Cumberland; and although the first cross with the short-horn does produce a good beast, no good breeder would choose to continue his stock from these crosses. Thirty of the best West Highland heifers, and four-score aged Highland black-faced wedders for the family use, along with the Galloway cattle, form the permanent stock on these lands. But from their extent, it is impossible to winter as many cattle as the grounds can summer; and therefore in April and May yearly, a flying stock of cattle, chiefly Galloways and West Highland heifers, are purchased in the local markets on their journey southward, and fed off on these pastures; and it is the custom to have an annual public sale of this flying stock. They are sold in lots, and are generally bought by cattle dealers and butchers. The greatest number are resold again at the great fair of Broughhill in Westmoreland, on the 1st of October. Thus the pastures are completely eased at the proper season, and left rough for the wintering stock, and about this period all accounts are settled, the remaining stocks, crops, &c. valued, and the profits or loss on the whole concern annually struck.

Sheep.—Except the black-faced stock already mentioned, as kept for the consumption of the family, no other sheep are kept, for it has been found that cattle pay much better: pure Leicester and South Downs have been kept as breeding stocks, as well as Cheviot and half-bred sheep, but the result has been to abandon a breeding stock of sheep entirely.

Lambs.—The breeding of lambs for sale to the butcher, has never been followed here, but breeding for a stock has been. The ewes have in every case lambed in the open pastures, and little or no loss has ever ensued from the practice.

In extensive stocks, it is impossible to protect the ewes in the lambing season, from the fall of rain or snow. In very small stocks, sheds for sheep may answer a very good purpose, but it has never been found necessary to provide such protection here. Folding ewes in a confined place in the lambing season, is decidedly an improper mode, and is never practised in this country.

The sheep commonly grazed in the district are the Cheviot breed, but probably the most profitable is the half-bred or cross, between the pure Leicester, and the pure Cheviot; for these possess the stamina or hardy constitution of the Cheviot, with the docile and gentle nature and feeding qualities of the Leicester breed, while the wool is improved by the cross. Sheep are seldom laid with tar and butter on these grounds, but otherwise every thing that can conduce to their health and comfort is attended to by a careful person who manages the stock.

Horses.—The farm horses in greatest repute in this district are the rough-legged Clydesdale or Lanarkshire breed. In this establishment, these and the Cleveland horses are generally used. The preference in the reporter's opinion is due to the Cleveland breed, for they are more quick in their movements, and consequently better adapted to light soils than the Clydesdale, which breed, however, is admirably adapted to heavy soils, and are remarkably quiet, and generally possess good constitutions.

Pigs.—This particular district produces great quantities of bacon and hams for the London and Liverpool markets, and the breed of pigs is in consequence a point much attended to. There are different breeds here, but the kind preferred in this establishment is what are provincially called the "prick ears," a well made, short-legged animal of its kind, of a yellowish-white color, averaging, when quite fat, sixteen or seventeen stone of fourteen pounds each. This variety seems of a remarkably sound constitution, and is generally fed off at from twelve to fifteen months old. In this district pigs are allowed a range of pasture, with food in their piggery at regular intervals, and they thrive remarkably when so managed. On this farm, however, they are only allowed the range of the straw-yards. They consume the refuse from the kitchen, aided by potatoes, &c. steamed for their use, and they have always yielded a very fair return.

Management.—Cleanliness, as well in making ready the food as in the piggery, is essentially necessary to promote the health of the animal, and fresh beds of clean straw are regularly given them. A steaming apparatus on the most approved principles for preparing the food of the horses, dairy cows and pigs, has always been used here, and ought to be used on every large farm, but attention should be paid not to give any food more than lukewarm to any stock.

IMPLEMENTS.

Ploughs.—Iron ploughs only are used. The first of the kind was manufactured by Wilkie, of Uddingstone, near Glasgow, but these implements are now regularly made on the best construction, by tradesmen in the neighborhood. They are uniformly drawn by two horses abreast only, and with such ploughs and horses, any kind of soil may be well cultivated. The furrow-cutting plough, described under the head of grass husbandry, may be made by any plough-wright, and is a most useful implement. The number of horses employed in drawing it, depends on the depth of the furrow, and the nature of the soil.

Carts.—Carts with iron axles and two shafts, as commonly used in Lanarkshire, drawn by a single horse, are decidedly the best, and no other kind is used here. In harvest and hay-making, a frame is mounted on the shelvings of such carts for bringing the crops from the fields.

Harrows.—Finlayson's patent harrow is greatly used here for cleaning lands. It is a very useful and excellent implement for such purposes. The common seed harrows are in use on this farm; some of these are made of iron.

Drill Machines.—A machine for sowing turneps by two drills at once is used here, and another machine mounted on a small wheel, and pushed by a man, for sowing grass and clover seed, is also in use.

Threshing and cleaning the Grain.—At first for many years this was done by a threshing machine driven by horses—latterly, it is altogether done by hand labor and by the flail, and paid for by the bushel of cleaned grain. The expense is probably as cheap by the flail as by the machine, and employment is thus given to the poor, and every purpose required is answered by the present practice.*

MANURE.

No part of rural economy is less understood or attended to than the management of manure; and it would require a treatise on the subject to detail the systems pursued in the best farmed Scotch districts, which are always held as the guide for good management here. It may be shortly stated that all the urine from the stables, yards, cow-houses, piggeries, &c. is carefully conducted by under drains into the dung-pits. The dung collected is carted out during the winter for turneps, and laid up in convenient places for a speedy application to the lands, the instant the season suits for sowing. The middens, or dung-hills, in the fields, are hollowed out in the bottoms, so as to prevent the moisture from escaping, and are regularly covered with mould. The carts are never allowed to pass along the dung heaps. The manure made in summer, when cattle get green food in the house, is always of better quality than winter-made dung, and is generally applied to the summer fallows. Short dung is unquestionably most suitable for turneps, as in that state it affords no interruption to the plough and drill. Long dung, that is to say, dung not fermented, may be applied to potatoes without any impropriety. The management of compost occupies considerable attention; frequent turnings, and probably twelve months are required to reduce the stubborn lumps of clay often used in the making compost, and turneps are in many cases raised by no other application.

* The experience of every other district of the kingdom is contrary to this conclusion. The machine threshes much more cleanly, and it is equally beneficial to the consumer and the farmer, from the facility with which it enables the latter to meet all the changes and exigencies of the market.

GENERAL CHARACTER OF THE DISTRICT.

The estate, of which the lands here described form a part, consists of an extensive district, in which there is a very considerable quantity of good loamy clay and gravelly soils on the rivers, but by far the greatest portion is clay soil. Horses are regularly bred by almost every farmer, and the dairy husbandry (chiefly in the making of butter) is largely followed. Every person produces a certain number of young cattle as well as fat beasts for market, and large quantities of pork and bacon are produced, besides considerable quantities of wheat, barley, oats and turneps. In this district, where a mixed system of husbandry is followed, from the necessity of attending markets, and from having a considerable intercourse with strangers, the farmers are sharp clear-sighted people, alive and ready to adopt any successful experiment, *after it has succeeded under the proprietor's management.* On this estate, a local farmer society, confined to its bounds, but having three hundred members, has long existed, by whom prizes are yearly awarded to every branch of good management in agricultural matters, and to the various descriptions of stock. The yeomanry thus meet regularly once a year; they hear the management of their farms discussed openly and freely; good managers are praised and rewarded, and indolence and bad management would be ashamed to exhibit themselves. All the good stock of the country is annually shown, and the spirit of emulation is invariably attended with good consequences at the next meeting.

The country is purely agricultural. No man is above his profession, and almost all are possessed of means fully equal to managing their lands in the best style. The country is now enclosed and subdivided into suitably sized fields. Quick hedges of thorn, kept neatly dressed by the pruning knife, are the common fence of the country, and few countries can boast of better hedges than this.

Except along the sides of the great roads, hedge-row trees are not usually seen or planted, and the country where grain is chiefly produced, has been purposely and judiciously left open, to admit a free current of air and sun to the crops, a point of much consequence in bad seasons, and in a climate as damp as this is. This district lies low. It extends from the head of the Solway Frith, rising from the level of the sea, with a very gentle general rise for twelve miles, to an altitude of about five or six hundred feet. The district is not subject to any temperate in their habits, and often attain a great age; pulmonary consumption, however, frequently makes its appearance, particularly in the vales descending towards this open country; and numbers of the youth of both sexes are cut off by this fatal malady.

PLANTING.

The management of plantations is probably foreign to the common operations of the farmer, but the shelter which they afford, render them at all times, and especially in an open district, objects of great moment even to him. Hundreds of acres have been planted on this estate, and the general success has been cheering. Trenching by the spade has never been done here preparatory to planting timber, the scale on which planting has been conducted being far to large to be managed in this way, but the lands have in every case been laid dry by open drains, and in some cases (particularly in planting land covered with short ling) the ground has been ploughed before planting by a plough drawn by four horses. For the first three years, the young trees have not grown so luxuriantly as might be desired, but in the fourth year, and afterwards, they push out vigorously. In every case care has been taken to plant hardwood trees of oak and ash, &c., and at such spaces that they may ultimately become the standard trees; and larch and Scotch fir are, in the meantime, planted as nurses, to be removed according to the necessity of the case. Every variety of tree thrives well on this property, but more particularly on the loamy soils.

CAPITAL AND ACCOUNTS.

Without an adequate capital, good farming cannot be followed. This, however, though a point of first consequence, we fear is often too little considered by the young farmer, and probably by the proprietor in letting his lands. Before letting lands, the proprietor or his agent should, if possible, be thoroughly acquainted with the farmer's means and capital, as well as his general habits and disposition; and if this is insisted on, it will prevent, in many cases, tenants of inadequate capital and bad character from obtaining leases.

Few, or almost no farmers, keep *regular* accounts, and the consequence is they are often in the dark as to the true state of their affairs. A system sufficiently simple and concise might be easily contrived to answer all the ends in view; but, from prejudice or want of habit, it is to be feared the general run of farmers dispense with the keeping regular accounts.

Laborers.—Laborers are easily obtained here, either for

piece-work or by the day. Their wages by the day are generally 1*s.* 4*d.* to 1*s.* 6*d.* in summer, and 1*s.* 2*d.* to 1*s.* 4*d.* in winter. These men are bred from infancy to all kinds of agricultural labor, and are generally expert in the use of the spade, scythe, &c. The real good farming laborer here cannot, with justice, be said to be in distress, for he always finds employment; and in this district the laborer has advantages unusual in some other parts of the country. For instance, his fuel costs only his own labor in cutting and preparing the peat; he, in every case, keeps a pig, and sometimes two; and the manure, ashes, &c. his pigs and cottage produce, are readily laid on by the farmers on their fallows for the cottager, who receives one crop of potatoes from his own manure. The great evil is early marriages; young men generally marry before they are twenty, and the females much sooner, and the alarming extent to which bastardy has increased in the country is a most serious evil. No laborers in these parishes possess any little property such as a cottage and garden of their own. The poor rates have not increased here for eleven years past, and the county rates are rather less now than at that period. The farm laborers are generally well behaved, cheerful, and obliging; and it is very rare indeed that any of that class ever appear to solicit aid from the parish vestries.

Glinger Bank, Longtown, 19th July, 1830.

From the Farmers' Cabinet.

Profitable Experiments.

Mr. Libby—*Dear Sir*:—It affords me great pleasure to communicate to your valuable journal the subjoined letter from Edward Tatnall, one of our best and most practical agriculturists. The rich results from his system of farming are *conclusive*, and should be extensively followed on *large* as well as *small* farms. With *lime* and *manure*, judiciously applied, he has made, you perceive, his fields, which were barren and overrun with noxious weeds, *productive* and *clean*, and yielding *such crops* as speak for themselves, and his superior mode of cultivation. Besides showing what can be done per acre by the same system, this communication teaches a lesson to owners of small and unproductive farms, (too numerous every where among us,) that they can be made valuable, and soon pay for themselves by this kind and proper treatment, and that the only way to farm *profitably* is to do it well; and to accomplish this, it is best always to commence enriching a few, rather than many acres.—

Yours truly, James W. Thomson,
Cor. Sec. New Castle Co. Ag. Society.

Value of Manure.

Interesting Experiments in Farming.

James W. Thomson, M. D., *Cor. Sec. Ag. Society*:—Although I am not what might be called a practical farmer, not having had the time to devote to it that I could have wished, yet having done something in that line for a considerable number of years, I feel a freedom in submitting a few experiments in the raising of produce, which may be improved upon by those better calculated, have more time, and are more devoted to the business of farming than I am. But to proceed to the experiments. Having purchased a small tract of poor land, near Wilmington, Delaware, which was overrun with the Daisy, (or Richardson's Pink,) and wishing to eradicate that pernicious weed as early as possible, I determined to work the ground hard, by a quick rotation of crops, taking care to lime and manure in proportion. After progressing in this way for a few years, it occurred to me that it might be worth while to ascertain the amount raised, and the value per acre, by the process I had adopted. The first lot of ten acres was treated as follows. In the fall I put on twenty-six loads of barn-yard manure to the acre, spread it evenly, and ploughed it in; after which it was well harrowed, and so left until spring, when it was again twice harrowed; the last time crosswise. It was then run out as near north and south as the field would admit of, and planted in drill, as follows, the first two rows three feet apart the third row seven feet; the next three feet, and so on, alternately through the field. The object in planting every other row seven feet apart, was, that it might have all the advantage of sun and air—but not wishing to lose too much ground, by planting so wide apart, I planted a row of potatoes in each seven foot space—the produce as follows: 500 bushels corn, at 60 cents, $300; and 500 bushels potatoes, sold at 50 cents, (exclusive of small ones,) $250. The corn was cut off in the fall, and shocked in the field, and the ground sown with wheat, (except where the shocks stood,) which was sown in the spring with millet. The produce was 300 bushels wheat, at $1 ten cents, $330. Millet, 4 tons, with the seed, worth $16 per ton, $64. Directly after harvest the wheat stubble was ploughed in, and part of the field sown with turneps; the other part with buckwheat—produce 200 bushels buckwheat, which sold at 50 cents, $100; and 600 bushels turneps, fed to cattle, at say 25 cents per bushel, $150; in all, $1194, independent of straw, fodder, &c. The field was then manured, and laid down in wheat, and sown with grass seed. The next experiment was on an adjoining lot of ten and a half acres, manured and tilled as the first, and planted in rows five feet apart one way, and two feet the other, and not exceeding three stalks in the hill, more frequently one and two; produce 80 bushels to the acre, at 75 cents per bushel, $630. The next spring it was ploughed, and planted in potatoes, in rows six feet apart, and manured in the row. I then struck out between the rows of potatoes, and planted corn two feet apart as above—the corn had no manure—produce as follows: 500 bushels sound corn, sold at 80 cents, $400; 1500 bushels potatoes, sold from 30 to 37½ cents, say 35 cents per bushel, $525. The seasons of 1835 and 1837 were unfavorable for corn with us, and it ripened late. Part of the above field is in with wheat, sown in the fall, with a light dressing of compost—the residue in spring wheat, without manure; both look well. In endeavoring to be as brief as possible, I am apprehensive I have not been sufficiently explicit to be clearly understood.

Thy friend, Edward Tatnall.

Harvesting of Corn.

To the Editor.—As the season is approaching in which the farmers will commence the securing the abundant crop of corn with which a bountiful Providence has blessed our country, it may be pertinent to the occasion to offer a few remarks upon the best mode of harvesting the crop.

Our Virginia ancestors and those who think it wise to plant and cultivate and gather as our fathers have done, pursue the old method; about this time they gather the blades below the ears of corn—after they consider the corn to be ripe, they top the stalks and secure all of the fodder in stacks for winter use. In November they pull the corn and remove it to cribs, where it is husked out at leisure. This mode is rapidly yielding in the stock districts to that first introduced among the graziers on the south branch of the Potomac. The farmers in the northern and middle districts of Kentucky, and in the Scioto valley of Ohio, have generally adopted this latter mode; which is to cut the stalks, corn, fodder and all, and place them in shocks commonly embracing sixteen hills square.

I have seen the richest crops of many climates gathered, and there is no operation in husbandry so animating as that of cutting corn in the mode just mentioned. It is a most cheering prospect to see twenty acres of corn pass in one or two days to a condition in which it is prepared to keep in the field throughout the winter. This remark is predicated particularly upon the plan of riddling the squares, instead of cutting the whole square at once. It will readily occur to any observing mind, that as corn does not ripen with precise regularity, if the entire square is cut out at once, some of the corn will mould and sometimes even the fodder will be affected, if the cutting shall be followed by warm or wet weather. To avoid this contingency, some graziers commence with the process of riddling, that is, they select only such part of the sixteen hills square as may be ripe—go through the field in this way, and in ten days complete the cutting of the square. By this process several important advantages are obtained—the greatest amount of fodder is secured, consistantly with the paramount object of saving the corn, and a nucleus for the shock being formed by the first cutting in the square, the shock becomes settled and stands better during the winter. In the rich counties of Clarke and Bourbon, they sometimes cut half of the square on one side and then in ten days finish it. Whilst many graziers in Fayette, Lincoln and Shelby, prefer the process of riddling.

In the course of October and November, these shocks are shucked out, the corn placed in cribs and two of the shocks placed together, or one placed upon the ground and two others put around it.

It is the opinion of practical farmers, that the practice of cutting corn in this mode secures the greatest amount of corn and fodder with the least expense, and is decidedly an improvement on the old Virginia plan, more especially when applied to the feeding of cattle or mules.—*Franklin Farmer.*

From the Farmer and Gardener.

Seasonable Hints.

Corn.—The *Cultivator* should be freely used in the corn field during this month, to extirpate weeds and grass, and keep the ground open. This instrument alone should be used after the corn attains much size, as it contributes greatly towards the growth, and advances the early maturity of the growing plants, without injuring their roots. We have long thought that the cutting up the roots of corn with the plough, was the cause of its being fired, and this opinion, we think, is founded in nature and reason, as it must be obvious to common sense, that every wound and laceration of the roots must act injuriously, by depriving the stalks not only of their sources of pasturage, but by causing a positive waste of nourishment absolutely necessary to their complete development. Besides this serious objection, it turns up the manure, exposes it to the deteriorating influence of the sun and air, and thus robs the grain of the nutriment intended to perfect its growth.

Briars.—If you have briars growing where your cattle feed, pour brine over them, and your cattle will, in their love for salt, destroy them. The labor of pouring brine over the briars, will not be much greater than that of salting your cattle, while that more irksome one, of cutting up the briars, will be performed by your cattle, so that, as a matter of economy of time and money you should pursue this course to get rid of those most troublesome pests.

Hay.—In stacking away your hay sprinkle salt over each layer. A peck of salt to the ton of hay is enough. The operation prevents the hay from heating, improves its quality, and renders it far more acceptable to your stock, and, in a great measure, does away with the necessity of salting them through the winter.

Meadows.—Farmers will consult their interest by keeping their stock off their meadows after the grass is cut; the after growth being necessary to protect the roots from the inclemency of our long and severe winters. We are sure that much harm is done to meadows by grazing them in the fall, and that it is to this cause we are to ascribe their early giving out, as every blade of grass thus destroyed, will be succeeded by some pestilent weed, as the earth makes a continual effort to clothe itself with herbage of some kind or other, and should man by his folly deprive it of its artificial covering, *nature* comes in to supply the effect of his bad management.

If weeds should spring up in your clover fields after your last cutting, they should be cut down and carted to your dung heap; by this operation two good things are effected: 1st, the weeds being taken off, do not *seed* and fill your clover field with their kind the succeeding year, and consequently, a clean crop of hay will be secured—and 2dly, your stock of manure will be increased.

Weeds.—If time can be spared, let the weeds and briars from the head-lands, lane and fence corners, be cut up and carted to the manure heap, and next year your stock of these pests will be quite decreased.

Curing of Hay.—No farmer should cure his hay except in small cocks; besides being the safest way, the hay is 20 per cent. better when thus cured.

From the Franklin Farmer.

The Principles of Breeding Cattle.

No. 4.—*The importance of good keep.*

In the rearing and improvement of a stock of cattle, nothing perhaps, is of more importance than the subject at the head of this article. Even the powerful excellence of blood and family are unavailing and insufficient, long to sustain a valuable herd without this indispensible accompaniament. Upon this subject our valuable authority has only a few remarks, but they are very comprehensive and decisive.

There is one circumstance however, which breeders occasionally forget, but which is of as much importance to the permanent value of his stock as any careful selection of animals can be—and that is *good keep.* All good stock must be both bred with attention, and *well fed.* It is *necessary* that these *two essentials,* in this species of improvement, should *always accompany each other;* for without good resources in keeping, it would be vain to attempt supporting a capital stock. This is true with regard to the original stock; it is yet more evident, when animals are brought from a better to a poorer soil.

Let it not be imagined that good keep is thus indispensibly necessary, only to the improved blooded cattle, for it is invariably true that mean feeding will produce mean animals, no matter what may be the breed. The owner of the hardy scrub cannot reasonably expect them to produce large and well fatted carcasses, or abundant secretions of milk, without rich pasturage in summer, and bountiful supplies of nutritious food in the winter. I believe it is conceded that blooded cattle require more luxuriant pasture and richer food, to cause them most fully and most rapidly to develope their excellencies, than the scrubs usually receive, nor is it a matter of wonder or regret; for how could it be expected that an animal which secretes two gallons of milk or gains two pounds of flesh daily, should subsist upon as little as one which secretes or gains half that quantity.

This great necessity of good keep begins with the very existence of the animal; and nature, as if to teach us the lesson, ere its entrance into the world, has provided for its use a superabundant store. As the first year of the animal's existence is naturally the period of most rapid growth, so also it should be the period of most luxuriant feeding. As the most liberal provision is now most amply repaid, so also is the slightest neglect the cause of irreparable loss. Instances are not uncommon of calves, which have gained an hundred pounds a month, for several months, upon kind feeding, and thus, in a few months attain a size, which, perhaps is not attained in the whole existence of those which are consigned to a scanty allowance of milk, and the more scanty grass of the yard or orchard.

The kind feeding of the calf, is scarcely more bountifully repaid than good keep to the dam. If she is kept in good condition she will not only be more healthy, but will conceive more quickly and more surely; will bring a

more thrifty calf; will pass through the dangers of parturition more safely, and will cleanse herself, and be restored, more speedily than if she is emaciated and exhausted by poor or scanty feeding.

Neither is good keeping without its genial influence even upon the sire of the herd. It is unquestionably true that a bull which is fed upon generous food will be a surer and a better breeder, than if his subsistence was poor and scanty. True, he never stands to the pail, nor draws at the yoke; but when fully engaged, his labors and excitements are scarcely less exhausting than are the duties of the cow or the ox, generous diet is therefore necessary to sustain him in imparting a vigorous constitution and fine spirit to his offspring. The observing farmer will readily avoid an extreme in this matter, by which heifers are sometimes made too fat to breed, and bulls too fat to be useful. But this is an extreme far less to be shunned, because far less than the other. R. W. S.

Hoven Cattle.

Don't kill if you can't cure.

A very simple remedy for relieving cattle that have eaten too much succulent clover or grass consists in making a band of straw, and putting it in the animal's mouth and passing the ends up over the head, and making it fast behind the horns. The animal will immediately begin to *chew* the band in order to remove it, and this process going on, will soon bring up the cud from the first stomach, and will give relief, provided the animal is kept in motion, and the disease has not advanced too far to be curable by simple means. This plan has often been resorted to with success, though it is believed it is not generally known.—*Farmers' Cabinet.*

Succoring Dutton Corn.

In answer to the question—"Should Dutton corn be succored?" the editor of the Cultivator says:

"We answer—the same rule will apply to the Dutton that applies to other corn—it increases the *proportion* of sound grain, and somewhat accelera'es the ripening process—though it does not, we think, increase the *quantity*, while it sensibly diminishes the good forage, and causes additional labor. We do not succor our corn."

We may state for the encouragement of others, that the *graziers* are graduating their expectations of the corn crops pretty high. Those who know what can be effected for the soil by a preparation with grasses and for the crop by *proper* culture, confidently expect 100 bushels of corn to the acre. This result has often been obtained—we know a number of farmers who obtain it nearly every year and who are unsatisfied with less—and we know it can be obtained by all, who, desirous of procuring it, prepare their land properly by grasses and manuring, put it in good heart and tilth and bestow careful attention to the cultivation of the crop. Let every farmer fix on 100 bushels of corn to the acre as the measure of the success he ought to obtain; and let none be satisfied with less.—*Franklin Farmer.*

The Wheat Crop in Virginia.

The Farmers' Register of June 23, says:

The present wheat crop throughout Virginia, and other adjacent States, so far as we have heard, is the best in quantity and quality combined, that has grown for many years—if not the best that has ever been made. Some partial disasters, on particular farms, have been suffered, from chinch bug, hessian fly, or rust; but nothing worth naming as affecting the general crop of Virginia. A more considerable cause of dimunition will be found in the circumstance that there is less surface now under wheat than a few years ago; as the repeated losses and failures of wheat have caused almost every farmer to withdraw some portion of his field (the part promising the least product,) from wheat culture, and substituting oats or rye. The crop is now so far advanced in lower Virginia, that it might be considered out of danger except from continued wet weather during the time of harvest, by which cause we have known one crop (in 1821) nearly lost, after it was ripe enough to be reaped. The weather now (June 25th) is very favorable.

Harvest was began on some of the most highly improved marled land on James River on the 18th inst. with purple straw wheat—which was as early as what is called May wheat elsewhere, was ready for the scythe. There has been a predominance of cold weather for the time of the year, through the last sixty days, or more, and the growth and ripening of wheat were every where more backward than usual. If the crop should prove as abundant as we now expect, it will be a most important means of restoring the commercial prosperity of the United States, and especially of Virginia, which has latterly been so wofully elipsed.

QUICK WORK.—A correspondent of the Philadelphia Ledger, says that Mr. George W. Smith, of Blockley township, Philadelphia county, has this harvest cut the wheat standing in the field in the morning, hauled it in, threshed and cleansed it, taken it to the mill, had it ground and brought home, had the flour made into bread, and eat part of it before night of the same day!

Morus Multicaulis.

THE subscribers are prepared to furnish Chinese Mulberry, or Morus multicaulis trees, in large or small quantities, delivered any time this fall after the first of October, or they will contract them delivered in the spring.

The trees were raised in this climate from layers, are from two to three feet high, of thrifty growth and matured wood, and will be sold at the lowest prices, in proportion to their size.

October and November are the most favorable months to transport them to the Western states or into Canada, or in any direction where they must be sent a distance by water communication.

Applications for Trees may be made at the Green House on Sophia-street, where they will be kept, or at the Seed Store in the Arcade; and orders from a distance, by mail, should be sent early, addressed to

REYNOLDS & BATEHAM.

July 28, 1838. *Rochester, N. Y.*

Silk Worms Eggs.

WE can furnish any quantity of Silk Worms Eggs, of the white or two crop variety.

REYNOLDS & BATEHAM.

Rochester, July 28, 1838.

ELECTION NOTICE.—*Sheriff's Office, Monroe County, Rochester, July 19th,* 1838.—A general election is to be held in the county of Monroe, on the 5th, 6th and 7th days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed.

DARIUS PERRIN, *Sheriff.*

State of New-York, Secretary's Office, Albany, July 16th, 1838.—SIR: I hereby give you notice, that at the next General Election in this State, to be held on the 5th, 6th and 7th days of November next, a Governor and Lieutenant Governor are to be elected.

I also give you notice, that a Senator is to be chosen in the Eighth Senate District, in the place of Isaac Lacy, whose term of office will expire on the last day of December. JOHN A DIX, *Secretary of State.*

To the Sheriff of Monroe county.

N. B. The Inspectors of Election in the several towns in your county, will give notice of the Election of a Representative to Congress from the 28th Congressional District. They will also give notice of the Election of Members of Assembly, and for filling any vacancies in county officers which may exist.

Turnep Seeds.

5,000 LBS. Turnep Seeds, of first quality, of the following kinds, will be supplied at the very lowest wholesale rates, which will enable venders to make large profits in selling by the pound, and far larger when selling in smaller parcels. Purple topped Ruta Baga or Yellow Swedish Turnep, White Swedish Turnep, Large White Flat Field, White Norfolk, Early White Dutch, Yellow Dutch, Yellow Flat Field, Yellow Aberdeen, Large Yellow Bullock, Long Tankard, Yellow Stone, White Stone, Yellow Maltese, Dale's New Yellow Hybrid, Swan's Egg, Red Top or Red Round, Green Top or Green Round, and others.

Also, for sale at the lowest wholesale prices, every other kind of Garden, Flower and Agricultural Seeds.

A liberal credit to venders, and priced Catalogues will be sent to all who desire.

WM. PRINCE & SONS.

Flushing, N. Y., July 12, 1838.

N. B. 600,000 Chinese Morus multicaulis trees, 3 to 6 feet high, deliverable in October—and 200,000 Morus expansa, Brussa, and other choice varieties. jy21.3t

Seed Buckwheat,

A GOOD clean article for sale low by

June 23. REYNOLDS & BATEHAM.

Root Cultivation.

A LARGE supply of new and genuine Ruta Baga, Mangel Wurtzel, Sugar Beet and Orange Carrot Seed, just received at the Rochester Seed Store.

REYNOLDS & BATEHAM.

Rochester, April 21, 1838.

Drill-Barrows or Planting Machines.

A NEW supply of Robbins' Patent Planting Machines, just received at the Rochester Seed Store.

Also, a number of Merchants' Patent Drill Barrows. [See No. 18, current vol. of the Genesee Farmer.]

May 5. REYNOLDS & BATEHAM.

Farm for Sale.

THE subscriber offers for sale a FARM, lying near the Seneca turnpike, two miles west of Manlius village, and three and a half miles from the Erie canal, containing 250 acres of excellent land; rising 220 acres in high cultivation; the soil rich and suitable for every agricultural purpose. There are on the premises, besides the dwelling house, three small convenient houses for the use of hired men who have families. On the Farm are four large Barns, with Sheds and Stables sufficient for 2000 sheep, besides other stock. The orchards are extensive; the fruit select and excellent.

If desired, the farm could be conveniently divided to suit purchasers.

Also, A Farm containing 120 acres of land, about 100 acres in cultivation, lying in the town of Lafayette, 12 miles from the Canal at Syracuse, and about 12 miles from the farm above described. On this farm is a convenient Dwelling House, two large and excellent Barns, with sheds and stables for sheep and stock, a good Saw Mill, surrounded by a lot of valuable timber.

Terms of sale will be favorable. Letters (postage paid) will be attended to. DAVID ELY.

Manlius, Onondaga Co., N. Y., July 2, 1838.

☞ The subscriber will offer at private sale, in September next, 500 Saxon Sheep, of the finest fleece, bred from imported stock. [jy 7-4t] D. ELY.

New Arrival of Turnep Seeds.

WE have just received from England a large additional supply of TURNEP SEEDS, among which are the following kinds:

Ruta Baga, or Yellow Swedish,
Dale's Yellow Hybrid,
Yellow Bullock, Yellow Scotch,
Yellow Aberdeen, Red Round,
White Globe or Flat,
White Norfolk, Long Tankard,
Early White Flat Dutch,
White Stone, Yellow Stone,
Yellow Malta, Yellow Dutch.

☞ See descriptive list on page 198, current vol. Genesee Farmer. REYNOLDS & BATEHAM.

Rochester Seed Store, June 23, 1838.

Red Clover Seed,

A FEW bushels just received, for sale by

June 23. REYNOLDS & BATEHAM.

Farmers' Books.

NOTICES on the Sugar Beet, containing a description of the culture and preservation of the plant; also explanations of the process of extracting its Sugar. Price 25 cts.

A Manual of the art of making and refining sugar from Beets. Price 75 cents.

Cobb's Manual on the Culture of Silk.
Chaptal's Agricultural Chemistry.
The Complete Farmer, by Fessenden.
Fessenden's American Gardener.
A Guide to Orchardists.
Smith's Treatise on the Honey Bee.
A Treatise on Cattle.
Mason's Farriery.
Barnum's American Farriery.
Vols. 1st and 4th, Genesee Farmer, bound.

For sale by D. HOYT,

Rochester, May 26, 1838. Bookseller, 6 State st.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public, that he has for sale at his Nursery in Rochester, Monroe county, state of New-York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

April 15, 1838.

N. B. CASH will be paid for a few thousand two years old APPLE TREES.

Monroe Horticultural Garden & Nurseries, Greece, Monroe County, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green-House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1838. ASA ROWE.